

IN THE SPECIFICATION

Please amend the Title on page 1 as follows: OPTICAL DISC RECORDING APPARATUS AND METHODS USING PSEUDO-RANDOM NUMBER SEQUENCE FOR RECORDING AUXILIARY INFORMATION, ~~OPTICAL DISC RECORDING METHOD, OPTICAL DISC, OPTICAL DISC REPRODUCING APPARATUS, AND OPTICAL DISC REPRODUCING METHOD~~

Please amend the paragraph beginning at page 11, line 15, as follows:

With the optical disc recording apparatus 1A according to the present embodiment, during a period corresponding to the lead-in area of the disc master 2, a disc identification (ID) code generating circuit 12 generates a disc ID code SC1 as auxiliary information, and the second modulating circuit 7 modulates the EFM signal S2 from the first modulating circuit 11 with the disc ID code SC1 to produce a modulated signal S3 [[3]], and supplies the modulated signal S3 to the optical modulator 6.

Please amend the paragraph beginning at page 11, line 13, as follows:

In response to the disc ID code SC1 from the disc ID code generating circuit 12, the M-sequence random number data MS from the pseudo-random number generating circuit 23, and the toggle signal TGL from the counter 24, the exclusive-OR circuit 25 [[24]] outputs an exclusive-OREd signal MS1 (see FIG. 4(F)).

Please amend the paragraph beginning at page 11, line 19, as follows:

Specifically, when the toggle signal TGL is of level “0”, if the disc ID code SC1 is of logic level “0”, then the exclusive-OR circuit 25 [[24]] outputs an exclusive-OREd signal MS1 which is represented by the logic level of the M-sequence random number data MS.

Conversely, if the disc ID code SC1 is of logic level “1”, then the exclusive-OR circuit 25 outputs an exclusive-OREd signal MS1 which is represented by an inversion of the logic level of the M-sequence random number data MS. The exclusive-OR circuit 25 [[24]] therefore modulates the disc ID code SC1 with the M-sequence random number data MS and the toggle signal TGL. The exclusive-OREd signal MS1 from the exclusive-OR circuit 25 [[24]] is supplied to the D terminal of a D flip-flop 26.

Please amend the paragraph beginning at page 46, line 2, as follows:

Specifically, when the toggle signal TGL is of level “0”, if the output data KD from the data selector 73 is of logic level “0”, then the exclusive-OR circuit 25 [[24]] outputs an exclusive-OREd signal MS1b which is represented by the logic level of the M-sequence random number data MS. Conversely, if the output data KD from the data selector 73 is of logic level “1”, then the exclusive-OR circuit 25 outputs an exclusive-OREd signal MS1b which is represented by an inversion of the logic level of the M-sequence random number data MS. The exclusive-OR circuit 25 [[24]] therefore modulates the encryption key information KY represented by the output data KD from the data selector 73 with the M-sequence random number data MS and the toggle signal TGL. The exclusive-OREd signal MS1b from the exclusive-OR circuit 25 [[24]] is supplied to the D terminal of the D flip-flop 26.

Please replace the Abstract in its entirety and substitute the new Abstract shown on the following page: